

Fixed Price meets Agile:

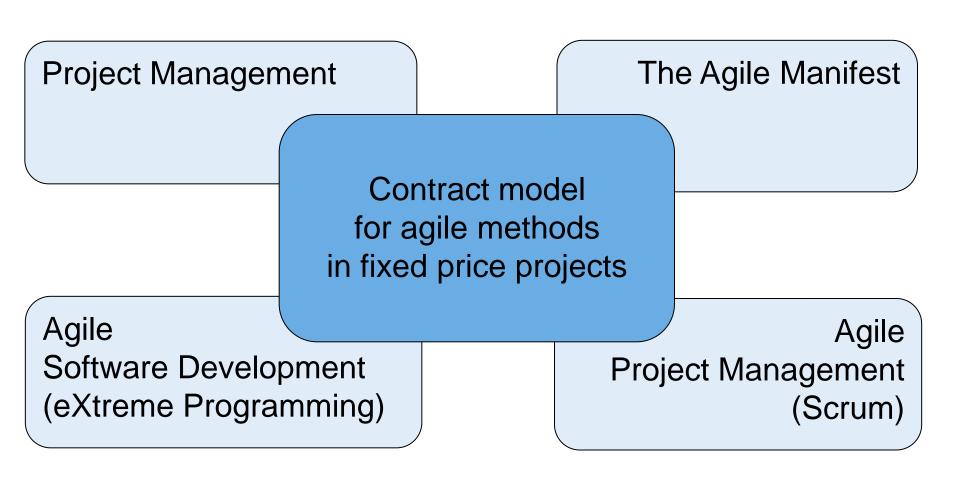
Contract model for agile methods in fixed price projects



Agenda

- Fixed Price or "Fixed Price": pro et contra
- What is "Agile"?
- Agile Fixed Price
- Q & A

Subject overlap



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Fixed Price or "Fixed Price" pro et contra



Fixed Price: Theory

For all requirements in a project, A firm, fixed price estimate is provided to the government for all identified requirements.

If the estimate is low, the contractor pays the difference.

If the estimate is high, the contractor gets a bigger profit.

Customer

- Predictable cost
- Predictable deliverables
- Predictable schedule

Supplier

- Predictable revenue
- Predictable demands

"Fixed Price": Reality

Fixed price contract causes a **conflict of interests** between the customer and the supplier.

Customer

- interprets requirements as broadly as possible, to get as much for their money as possible
- wants superlative quality
- burned out programmers are not the customer's problem, unless they threaten delivery

conflicting interests

Supplier

 interprets requirements as narrowly as possible, to reduce resources



- wants to invest in just enough quality so that the customer will pay
- wants the team members to be successful on this project, and to stick around for the next one

Typical "Fixed Price" Contract

- Client sends out tender to 3+ potential suppliers.
 Everything is equally important.
 Assume total is \$5M.
- All suppliers place a bid of around \$5M.
- One supplier chosen and contract signed.
- Change requests start coming in from day one.
 - All changes are expensive.
 - Project ends up with millions of dollars in change requests.
- After acceptance there still are more work to do because of bugs and some functionality that is not really completed or useful.
- Project cost at end is \$10M delivered late.

Example project from National Public Radio in the U.S. Source: Jeff Sutherland, 2008, Money for nothing and your change for free: Agile Contracts

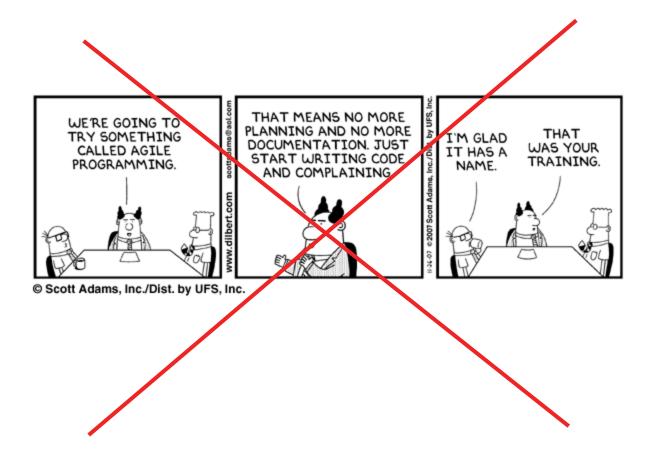
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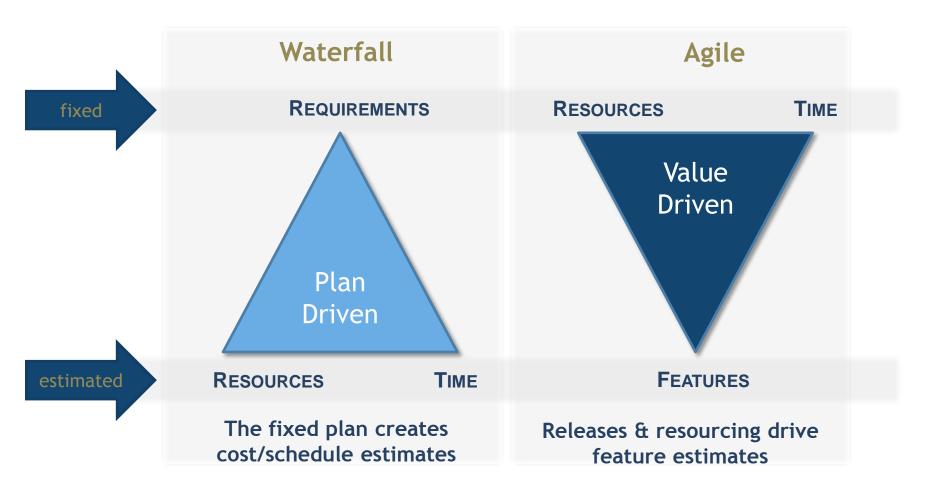
What is "Agile"?



What is "Agile"?



Waterfall vs Agile: Not Every Requirement FITS Agile.



Info-Tech Insight:

In order to manage "the plan", waterfall demands tight control over schedule and scope. In contrast, Agile turns it all upside down and focuses on collaboration and delivered value.

The software is "soft" by nature

Axiom:

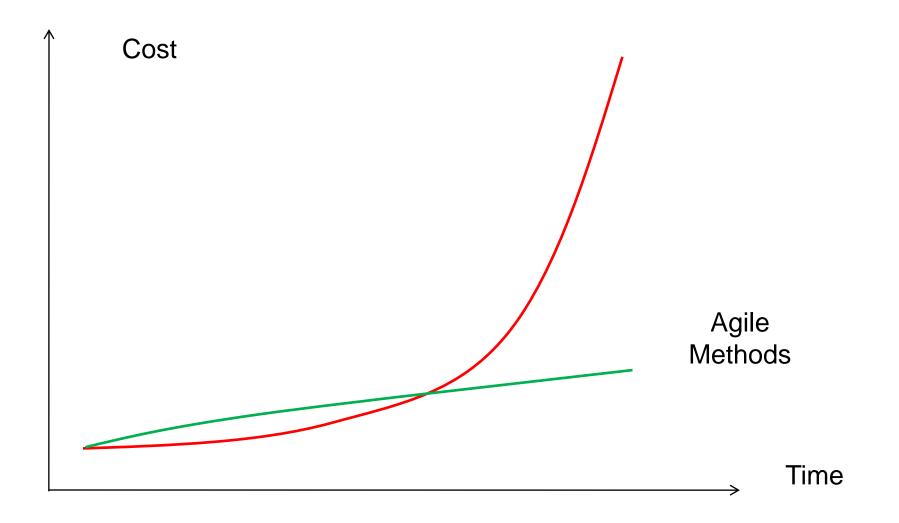
The **requirements** for software **will change** during the development.

Because **at the beginning** of a software development project **neither** the customer **nor** the developers can know how the software looks in all details at the end of the project.

Conclusion:

Changes to the requirements are an important part of the software development process.

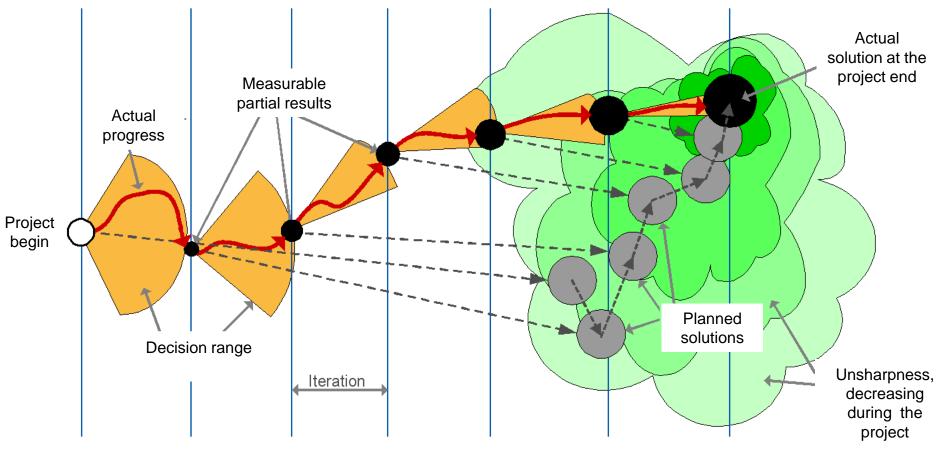
"Cost of Change" Curve



Source: Kent Auer, Roy Miller, 2002, Planning Extreme Programming: Playing to Win

"Cost of Change" Curve – Agile solution

- The software is developed in several short iterations.
- The requirements are updated at the beginning of every iteration.



Source: Bernd Oestereich, Christian Weiss, 2007, APM - Agiles Projektmanagement, www.oose.de

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Agile Fixed Price



Benefits

For the whole requirements of a project an a **firm**, **fixed price** is agreed, but...

Customer

- can add the new requirements during the project, the price remains fixed.
- gets the product ahead of schedule and pays less.

Supplier

- can implement the new requirements, the cost remains fixed.
- gets a bonus if the project is successfully completed ahead of schedule.

Customer + Supplier = Team :-)



common goals

Prerequisite

- The requirements (project scope) are managed as a list: one requirement - one entry.
- Each requirement is evaluated by the customer for its Business Value.
- Each requirement is evaluated by the developer for its implementation cost.
- Project cost is the sum of the costs of all requirements.
- The customer and the supplier use agile methods, both for project management (e.g. Scrum) and for development (e.g. eXtreme Programming)

How it works: new requirements will be implemented for free

- The requirements are prioritized by the customer with the highest Business Value on the top of the list.
- The requirements are implemented iteratively in this sequence, so that the most valuable requirements are delivered first.
- Before each iteration, the requirements are reprioritized
 - The customer may add new requirements,
 - Requirements with a lower value and the same cost are removed from the list,
- The project scope remains fixed.

How it works: new requirements will be implemented for free

Agile Fixed Price

Project scope:
each requirement is
prioritized (Business Value)
and
estimated individually

Fixed Price

Project scope:
all requirements are
equally important
and
estimated together

Requirement

Requirement

Requirement

new Requirement

old Requirement

Requirements

new Requirement (CR)

new Requirement (CR)

Fixed Price

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Thank you :-)



Sources (sorted alphabetically)

- Scott Ambler, 2007
 The consequences of fixed-price IT projects
- Kent Auer, Roy Miller, 2002
 Planning Extreme Programming: Playing to Win
- Kent Beck, Dave Cleal, 1999
 Optional Scope Contracts
- Bernd Oestereich, Christian Weiss, 2007, APM - Agiles Projektmanagement
- Bernd Oestereich, 2006
 Der Agiler Festpeis und andere Preis- und Vertragsmodelle
- Peter Stevens, 2009
 10 Contracts for your next Agile Software Project
- Jeff Sutherland, 2008,
 Money for nothing and your change for free: Agile Contracts

more links about this subject:

http://delicious.com/sturchyn/agile+contract

Many thanks to

- Andreas Grunewald for the presentation
 "Agile Methoden BoF Presentation A&M Community & CSC Agilist"
- the CSC Agilists Community for discussion, knowledge exchange and ideas
- my colleagues in the team Portal Solutions.

